

REMARKS

In response to the Office Action mailed on December 8, 2003, Applicants respectfully request reconsideration. To further the prosecution of this Application, Applicants submit the following the following amendments as well as remarks discussing patentability of rejected and newly added claims.

Claims 1-43 were previously pending in the subject Application. Claims 5, 8, 18, and 35 are being amended by way of this amendment. Claims 44-50 are being added by way of this amendment. Thus, after entry of this Amendment, claims 1-50 will be pending. No new matter was added to the application when amending or adding these claims. Also, the submission of any amendments should not be interpreted as acquiescing to any of the rejections.

The following remarks address the rejections of claims 1-43 as set out in the present Office Action and patentability of newly added claims 44-50. Applicants respectfully request reconsideration.

Rejections of Claims 1, 5, and 8 under 35 U.S.C. § 112 paragraph 2

The Office Action includes a rejection of claims 1, 5, and 8 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Regarding claim 1 and, in particular, the use of "common object definitions" at line 11, Applicant traverses the insufficient antecedent basis rejection and submits that the claim is proper and definite. The phrase "common object definitions" in the last line of claim 1 is the first occurrence of such a phrase and therefore requires no antecedent basis. There is no definite article (e.g., "the") preceding the phrase.

Regarding claim 1 and, in particular, the use of "generating a signal" at line 11, Applicant traverses the rejection and submits that the claim is proper and definite. The preamble of the claim specifically recites that the method of defining objects is performed in a "client computer system." Thus, the client computer system performs the step of "generating a signal" and there is no ambiguity. Moreover, claim 1 specifically defines a purpose of the signal. For example, the "signal" generated by the client computer system indicates whether the global object specification and local object specification define common object definitions. Still further, any possible ambiguities in the claim language, if not apparent to one of skill in the art, are resolved in favor of what is described in the specification. Accordingly, the Applicant of the subject application respectfully requests removal of this rejection.

Regarding claim 5 and, in particular, the use of "the object creation right" at line 23, Applicant has amended the claim to resolve any antecedent basis problem. Applicant is appreciative of the Examiner's careful review to put the claims in better condition for allowance.

Regarding claim 8 and, in particular, the use of "in response to determining that the server properly created the global object specification" at line 13, Applicant has amended the claim to resolve any antecedent basis problem. Applicant is appreciative of the Examiner's careful review to put the claims in better condition for allowance.

Note that the Applicant has amended claims 18 and 35 to correct minor typographical errors.

Rejection of Originally Submitted Claim 1 under 35 U.S.C. § 102(e)

The Examiner has rejected originally submitted claim 1 under

35 U.S.C. § 102(e) as being anticipated by Simonoff (U.S. Patent 6,463,460). The Office Action likens elements in Simonoff to those in claim 1 to reject the claimed invention.

In general, Simonoff discloses a White Board system permitting a plurality of users to collaborate with one another irrespective of a remote user's hardware platform. Each of the users generate or create objects that are transferred to a server that, in turn, forwards the user generated objects amongst each other based on an assigned identifier. Based on forwarding of user-generated objects, each of the users of the white board system can view a common video display even though the users are located remotely with respect to each other.

A brief description of problems associated with conventional collaboration systems will help to illustrate distinctions as well as advantages of embodiments of the invention over the prior art. These were discussed in the background section of the subject application and are again discussed below.

By way of example, consider a typical object oriented client/server collaboration software system. In such a system, the client software (i.e. client collaboration software in this example) creates objects and assigns properties to the objects including the individual object identification for that object. The client software might generate the object identification for a particular object based on an algorithm that ensures that the object identification is unique with respect to that client and not necessarily other objects created by other users in the collaboration system. However, once a given client collaboration software forwards objects which it creates in this manner to the server collaboration software which maintains the objects in the object repository (e.g., an object database), there is no guarantee that the object identifications created by the given client will be unique in relation to all other objects created by all other clients involved in collaboration session. It may be the case, for example, that a

second client generates a second object having the same object identification as the first object created by the first client. When the second client transfers the second object to the collaboration server for placement into the object database, the first and second objects will each contain the same object identification. This may cause the server collaboration software to be confused as to which object is to be obtained, manipulated or otherwise operate upon when a client refers to the object identification shared by two or more objects in the object database.

Embodiments of the invention overcome such deficiencies and support techniques allowing for the creation and management of objects so that each contain a unique object identification. For example, embodiments of the invention provide a high degree of certainty that an object identification for an object, as generated by a server, will be unique across all clients and/or servers that may require access to the object. In this manner, clients can create objects that may always be differentiated from each other based on their object identifications. For example, in the system of the invention, during the process of creating uniquely identify the objects, the system of the invention also provides a technique to ensure that the server properly creates and manages the precise set of objects the client provides the server. In other words, during the process of creating a set of objects having a unique object identification across all clients in the server, the system of the invention also provides techniques used by the client to ensure that the server has properly accounted for and created (e.g., in the object database within the server) precisely the set of objects which the client initially provided to the server. For instance, in a specific application, the client creates one or more objects and sends a corresponding local object specification to a server. The server generates a global object specification based on the received local object specification and sends it to the client. The client compares the local object specification (as sent to the server) to the global object specification received from the server. The client ensures that the server created the proper set of objects by checking that the global object specification (as

received from the server) includes equivalent object definitions as in the local object specification sent to the server. In this manner, the client may be assured that the server will distribute an exact corresponding set of uniquely identified objects to other clients, for example, which may be participating in a collaboration session.

Applicant respectfully submits that the invention as recited in originally submitted claim 1 is neither anticipated nor obvious because it includes distinguishing limitations not taught or suggested by Simonoff or any of the other cited references. More specifically, the claimed invention recites a client computer system "generating a signal indicating whether the global object specification and the local object specification define common object definitions." Thus, the generated signal indicates whether the global object specification received by the client includes equivalent object definitions as the local object specification. Note that the method of claim 1 is performed from the perspective of the client. That is, the preamble of claim 1 recites that the method pertains to use "In a client computer system." Neither Simonoff nor any other cited reference discloses this aspect of the invention nor its advantages.

For example, in Simonoff, users (i.e., clients) generate objects that are transmitted to a server. The server selectively controls transmission of the objects to respective computers in the collaboration system. The Office Action likens the step of "generating a signal indicating whether the global object specification and the local object specification define common object definitions" to creating a wrapper object as stated in the passage at column 16, lines 25-31 of Simonoff. The cited passage and flow chart illustrate a technique of creating objects at a client computer. For example, in step S22, the white board code (running in white board clients 301) determines whether an object created in response to movement of a mouse at a client is a graphic. If so, the object is placed in its own wrapper at the client in step S25. Following in step S26, the

white board code adds the wrapper object to the vector of white board objects drawn. In step S27, the white board code displays the object on the white board of the client. Thus, according to Simonoff, a user at client 301 moves the mouse and generates a graphic which is detected by the software running in the client.

The Office Action recites column 16, lines 25-31 to reject this aspect of the claimed invention. The cited passage reads as follows:

"As mentioned above, the wrapper includes a unique identifier so that the wrapper object can be locally identified, used by the local white board client 301 and globally identified to prevent collisions with other wrapper objects. During step S26, the wrapper object is added to a vector holding all wrapper objects drawn on the local white board client 301."

First, the passage does not recite generating a signal. The passage recites a purpose of the wrapper. Nor does the passage recite teach or suggest generating a signal indicating whether the global object specification (which was received from a server) and the local object specification (which was sent to the server to create the global object specification) include common object definitions. For example, in Simonoff, server 102 assigns the clients 301 a unique identifier so that objects created by the client and corresponding names are unique so as to "prevent collisions with other wrapper objects" (see Abstract at lines 6-9 of Simonoff). Presumably, use of the term "globally identified" at column 16, line 28 indicates that Simonoff indicates other clients in the system utilize the same identifier to reference the same object generated by a client. Recall that each client in the whiteboard system includes a unique address so it would be possible for a client to generate a uniquely named object that need not be renamed. This would prevent collisions. There is no interaction with a server 102 in Simonoff (as there is in the claimed invention) to ensure global uniqueness other than the server assigning the unique identifier. For example,

the server in Simonoff does not compare a local object specification to a global object specification to determine whether they define common objects. Thus, there would not even be a need for white board client 301 to generate a "signal" as in the claimed invention because the client 301 would already know that the unique identifier (associated with the wrapper), as its name suggests, is already unique with respect to itself as well as globally with respect to other clients. All the cited passage recites is that the wrapper includes a unique identifier. As discussed at column 16, line 10-11, the client 301 assigns the unique identifier to the wrapper.

Second, the cited passage at column 16, lines 25-31 does not parallel the other cited passages that the Office Action cites to reject the claimed invention. More specifically, it is not clear how the cited passage (column 7, lines 2-6 and column 16, lines 25-29) are related to the flowchart in FIG. 9B and more specifically column 16 lines 25-31. Nor does the passage recite teach or suggest generating a signal indicating whether the global object specification (which was received from a server) and the local object specification (which was sent to the server to create the global object specification) include common object definitions. Client 301 has no knowledge have a common object definition because Simonoff does not recite a comparison step nor generating a signal as in the claimed invention. Note that FIG. 9B in Simonoff is directed toward detecting a mouse down event at a local client. If the mouse down event occurs, software at the client checks whether an object associated with the mouse event includes graphics. If so, then the object is put in its own wrapper object. It is not clear how step 26, even if it was considered to "generate a signal" pertains to the first two elements of the claimed invention at line 3-6 in claim 1. The former cited passage (column 7, lines 2-6) has to do with disseminating objects from a server while the latter cited passage (column 16, lines 25-31) has to do with generating an object at a client with a unique name. If the Examiner is to maintain the rejection, Applicant requests a clear explanation as to how the cite passages

logically fit together to anticipate the claimed invention. As discussed, the last portion of the claim discusses "generating a signal whether the global object specification and local object specification define common object definitions."

In the context of the embodiment discussed above, and as recited in the text of claim 1, the generated signal indicates whether the server created the proper set of objects by checking that the global object specification (as received from the server) includes equivalent or common object definitions as in the local object specification (as sent to the server). Based on a setting of the signal, the client may be assured that the server will distribute an exact corresponding set of uniquely identifies objects to other clients, for example, which may be participating in a collaboration session. Simonoff does not teach or suggest this technique as recited in claim1.

For the reasons stated above, Applicants submit that claim 1 is patentably distinct and advantageous over the cited prior art, and the rejection of claim 1 under 35 U.S.C. §102(e) should be withdrawn. Accordingly, allowance of claim 1 as well as corresponding dependent claims 2-8 is respectfully requested. If the rejection of claim 1 is to be maintained, Applicants respectfully request that the Examiner point out with particularity where the cited prior art discloses a technique of "generating a signal indicating whether the global object specification and the local object specification define common object definitions" in the context of the other claim limitations as recited in claim 1.

It is respectfully submitted that claim 19 includes similar patentable distinctions over the cited prior art. Thus, Applicants respectfully request allowance of claim 19 and corresponding dependent claims 20-26.



It is respectfully submitted that claim 38 includes similar patentable distinctions over the cited prior art. Thus, Applicants respectfully request allowance of claim 38.

It is respectfully submitted that claim 41 includes similar patentable distinctions over the cited prior art. Thus, Applicants respectfully request allowance of claim 41 and corresponding dependent claims 42-43.

Applicant would like to point out that rejected dependent claim 2 further distinguishes the invention of claim 1 over the cited prior art. Specifically, dependent claim 2 recites "reserving an object creation right with the server." According to Simonoff, the client creates a wrapper with itself and not the whiteboard server. Thus, the rejection is improper and the claim is not anticipated. In Simonoff, there is no need to reserve a creation right with the server because each object created by the client already includes a unique identifier. Applicant respectfully requests allowance of claim 2 or citing of specific parallel language reciting every element of the claimed invention.

Applicant would like to point out that rejected dependent claim 3 further distinguishes the invention of claim 2 over the cited prior art. Specifically, dependent claim 3 recites "checking for an existence of an object specification on the server, and if no object specification exists on the server, creating a reservation object specification on the server in order to reserve the object creation right with the server on behalf of the client, and if an object specification exists on the server, receiving a denial of the object creation right for the client." According to Simonoff, the client creates a wrapper with itself and not the whiteboard server. There is no receiving a denial of the object creation right because the client in Simonoff never asks for a reservation. Applicant respectfully requests allowance of claim 3 or citing of specific parallel language

reciting every element of the claimed invention. Simonoff does not anticipate claims 4-7 for similar reasons.

Applicant would like to point out that rejected dependent claim 8 further distinguishes the invention of claim 7 over the cited prior art. Specifically, dependent claim 8 recites "providing confirmation of acceptance of the global object specification..." Applicant respectfully submits that the object names generated by clients in Simonoff are already globally thus there would be no need to implement the limitation found in claim 8. Applicant respectfully requests allowance of claim 3 or citing of specific parallel language reciting every element of the claimed invention.

New claim 48 further distinguishes the invention over the cited art. For example, claim 48 recites, at the client: comparing the local object specification provided to the server with the global object specification received from the server; and utilizing the unique global object identification provided by the server to identify the global object specification. As discussed, Simonoff discloses a technique of generating the unique identifier at the client rather than at the server as in the claimed invention. Thus, Applicant also respectfully requests allowance of claim 48.

New claim 49 further distinguishes the invention in claim 1 over the cited art. For example, claim 49 recites providing a high degree of certainty that the unique object identification, as generated by the server, is unique across all clients that access an object definition associated with a corresponding unique object identification. As discussed, Simonoff discloses a technique of generating the unique identifier at the client rather than at the server as in the claimed invention. Thus, Applicant also respectfully requests allowance of claim 49.

Rejection of Originally Submitted Claim 9

The Office rejects claim 9 for similar reasons as cited for claim 1 discussed above. Indeed, the server in Simonoff stores objects created by clients 301. Further, the server in Simonoff distributes the user-generated objects. However, Applicant respectfully traverses the rejection because Simonoff does not recite use of “a server computer system” that defines “a unique global object identification” associated with a corresponding global object definition. As recited by the Office Action at column 16, lines 25-31, the clients and not the server in Simonoff create unique identifiers (presumably names) for corresponding objects. More specifically, the passage (column 16, lines 25-31 Simonoff) refers to flow charts in Figures 9A and 9B that are written from the perspective of the client which generate unique object identifiers. Thus, there is no need in Simonoff for the servers to receive an object and generate a unique identification as in the claimed invention. Accordingly, Applicant requests allowance of claim 9 as well as corresponding and further limiting dependent claims 10-17.

It is respectfully submitted that claim 27 includes similar patentable distinctions over the cited prior art. Thus, Applicants respectfully request allowance of claim 27 and corresponding dependent claims 28-36.

It is respectfully submitted that claim 39 includes similar patentable distinctions over the cited prior art. Thus, Applicants respectfully request allowance of claim 39.

New claim 50 depends from claim 9 and recites that the method at the server computer system includes “replacing an identifier associated with the received local object specification with the unique global object identification so that an object specification associated with the received local object specification is globally unique; and providing the unique global object identification along with the global object specification to the client.” None of the cited references teach

or suggest this aspect of the invention. Thus, Applicant respectfully requests allowance of claim 50.

#### Rejection of Originally Submitted Claim 18

The Office rejects claim 18 for similar reasons as cited for claim 1 discussed above. Indeed, the server in Simonoff stores objects created by clients 301. Further, the server in Simonoff distributes the user-generated objects. However, Applicant respectfully traverses the rejection because Simonoff does not recite, "comparing, in the client, the global object specification to the local object specification to determine that the server properly created the global object specification based upon the local object specification, and if the server properly created the global object specification, replacing the local object specification in the client with the global object specification received from the server, and if the server improperly created a global object specification, providing from the client an indication of an error to the server."

As recited by the Office Action at column 16, lines 25-31, the clients and not the server in Simonoff create unique identifiers (presumably names) for corresponding objects. More specifically, the passage (column 16, lines 25-31 Simonoff) refers to flow charts in Figures 9A and 9B that are written from the perspective of the client which generate unique object identifiers. Thus, there is no need in Simonoff for the clients in Simonoff to compare the global specification to the local specification.

Additionally, there is no need in Simonoff to replace a local object specification with a global object specification received from a server. Nor is there an indication in Simonoff for the client to provide an indication of an error to the server. As discussed above, the claimed invention is applicable for use in

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applications in which, during the process of creating a set of objects having a unique object identification across all clients in the server, the claimed invention at the client ensures that the server has properly accounted for and created (e.g., in the object database within the server) precisely the set of objects which the client initially provided to the server. Simonoff does not teach or suggest this aspect of the claimed invention. Accordingly, Applicant requests allowance of claim 18 as well as similar claims 37 and 40.

#### New Claims 44-48

Claim 44 includes similar limitations as discussed above for claim 1 with yet additional limitations over the cited references. Allowance of claim 44 and corresponding dependent claims 45-47 is respectfully requested.

#### CONCLUSION

In view of the foregoing remarks, Applicants submit that the pending claims as well as newly added claims are in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after reviewing this Response, that the pending claims are not in condition for allowance, the Examiner is respectfully requested to call the Applicant(s) Representative at the number below.

Applicants hereby petition for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

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If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully request(s)ed to contact the undersigned Attorney at (508) 366-9600, in Westborough, Massachusetts.

Respectfully submitted,



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